



Santhera Pharmaceuticals

Developing medicines to meet the needs of patients living with rare diseases

Presentation by Dario Eklund, CEO

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Presentation Overview

- (1) Santhera in a snapshot**
- (2) Duchenne muscular dystrophy (DMD) and the need for a better foundational therapy**
- (3) Vamorolone and commercial strategy**
- (4) Financial status**



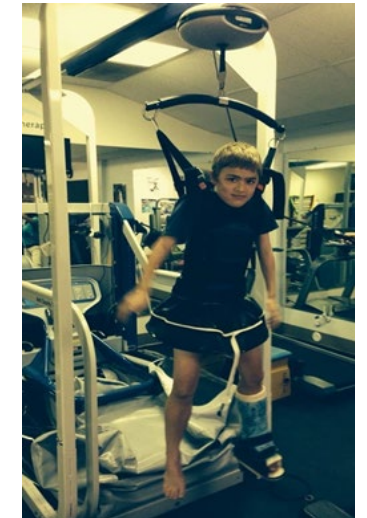
Commercial stage company in attractive DMD market

- **SIX Swiss Exchange listed company (SANN)**
- **Lead asset vamorolone in DMD (and beyond)**
 - Safer alternative to corticosteroids
 - Regulatory decisions in Q4-2023 (US, EU, UK)
 - Recent Catalyst US deal valued at up to USD 231 million plus royalties
- **Cash to execute own EU commercial strategy into 2025**

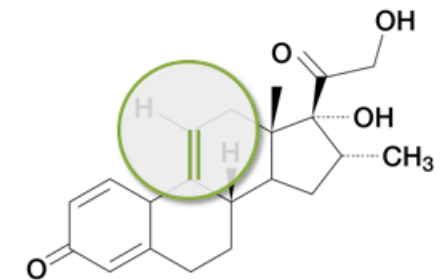
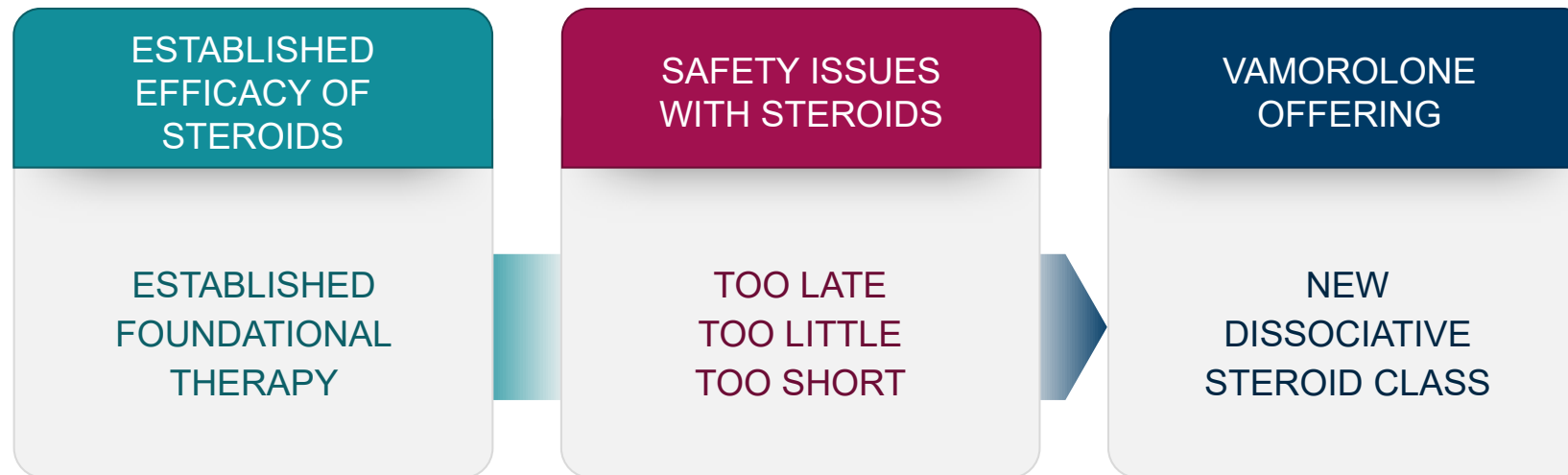


Duchenne muscular dystrophy (DMD)

- **Genetic disease causing progressive muscle weakness**
 - Loss of ambulation in early teenage years
 - Respiratory failure and cardiac complications
 - Life expectancy in the late twenties
 - 30 – 35,000 patients in US and EU, combined
 - Corticosteroids standard of care
- **Current therapies with intrinsic limitations**
 - Exon skipping drugs
 - Micro-dystrophin gene therapy

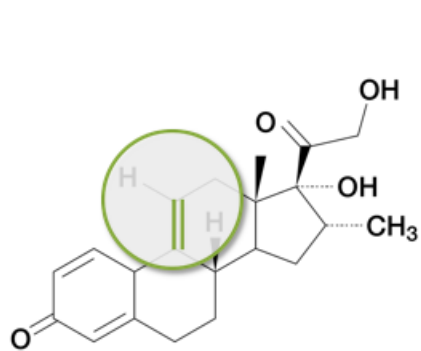


Vamorolone can fill the need for a better foundational therapy in DMD



Vamorolone dissociative properties

Subtle but impactful difference in chemical structure separates vamorolone from classical steroids¹⁻⁵



Signature double bond impacts receptor binding and alters enzyme and membrane interactions



Like corticosteroids, efficacy maintained by potent anti-inflammatory action

- Retained inhibition of NF- κ B pro-inflammatory transcription factor



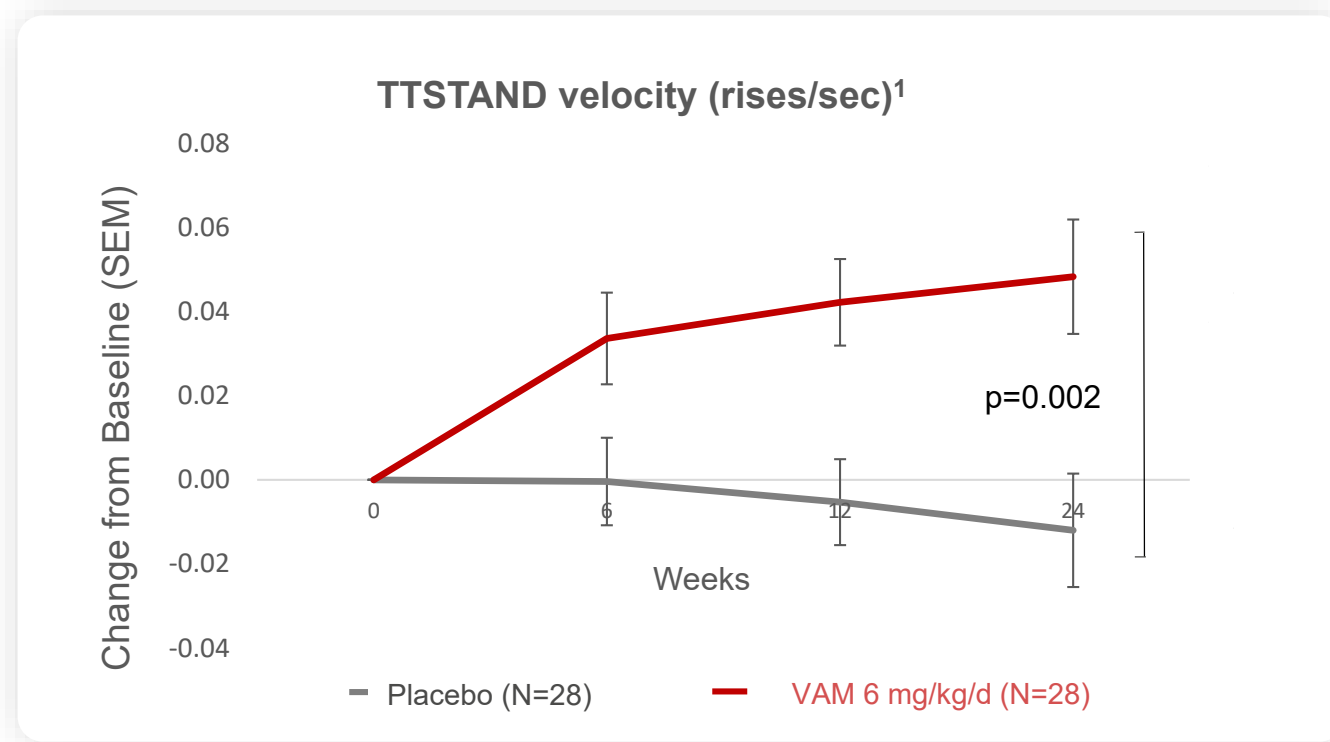
Unlike corticosteroids, potential for reduction of steroid-associated side effects

- Less activation of genes related to side effects
- Not a substrate of hydroxysteroid dehydrogenase
- Potent mineralocorticoid antagonist (eplerenone-like)
- Membrane stabilizer

Primary endpoint was met in pivotal clinical trial (VISION-DMD)



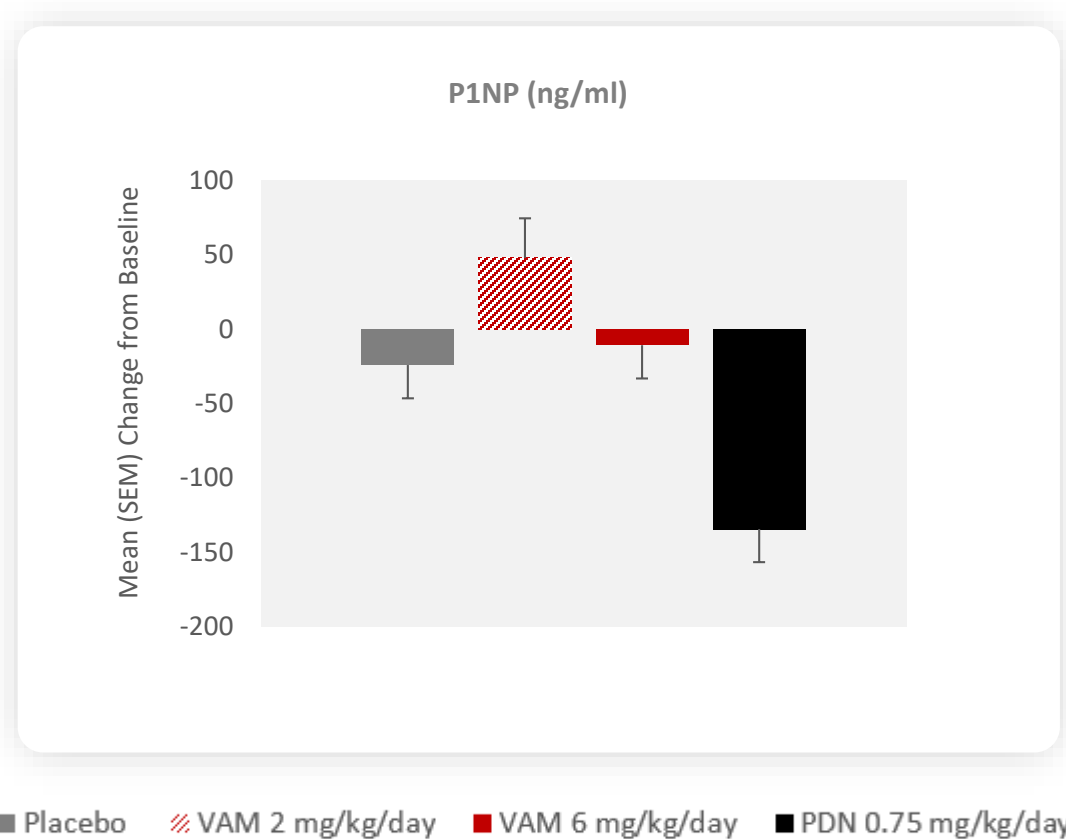
Rise time (sec) ^{1,2}	BL	w 24	% Change
VAM 6 mg/kg/d	6.0	4.6	- 23%
Placebo	5.4	5.5	+ 2%



1. mITT-1: modified intention to treat population from period 1, MMRM estimates of changes from baseline (BL),
 2. Press Release June 1, 2021, descriptive statistics

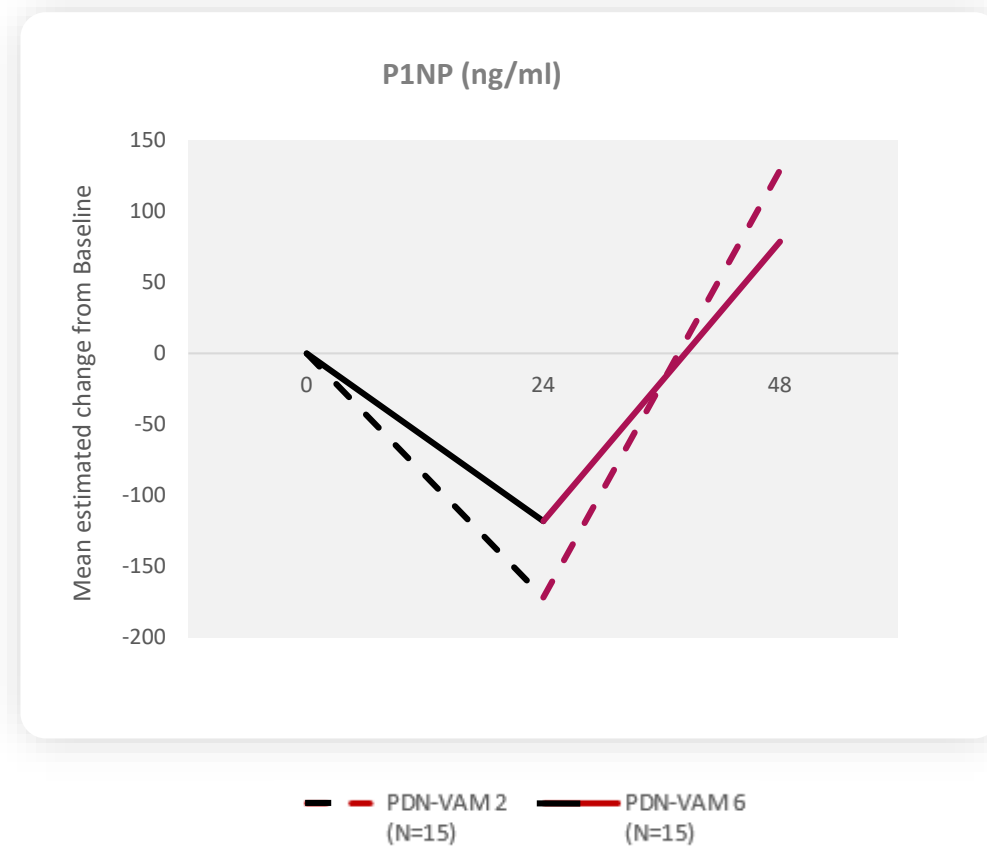
Vamorolone has no negative impact on bone biomarkers

Example shown for biomarker of bone formation (VISION-DMD at 24 weeks)



Vamorolone leads to biomarker recovery after switch from prednisone

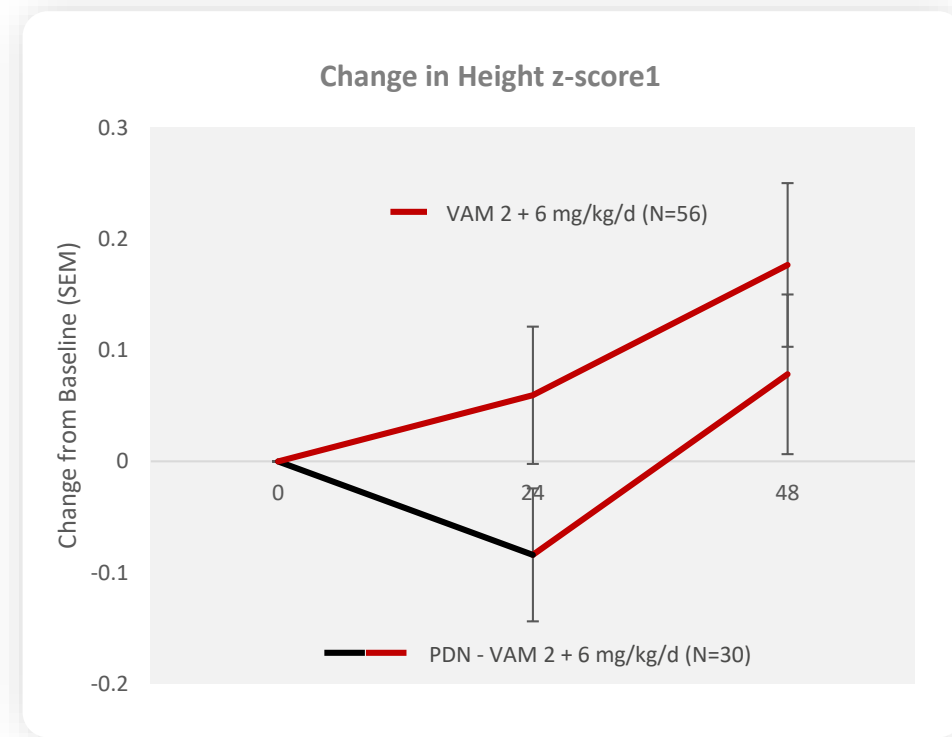
Example shown for biomarker of bone formation (VISION-DMD)



Data from VISION-DMD Pivotal Study on File 2022, PDN, prednisone; VAM, vamorolone.
P1NP, procollagen type 1 N-terminal pro-peptide. Safety population (SAF-2), change from baseline to week 48

Switching from prednisone to vamorolone recovers normal growth

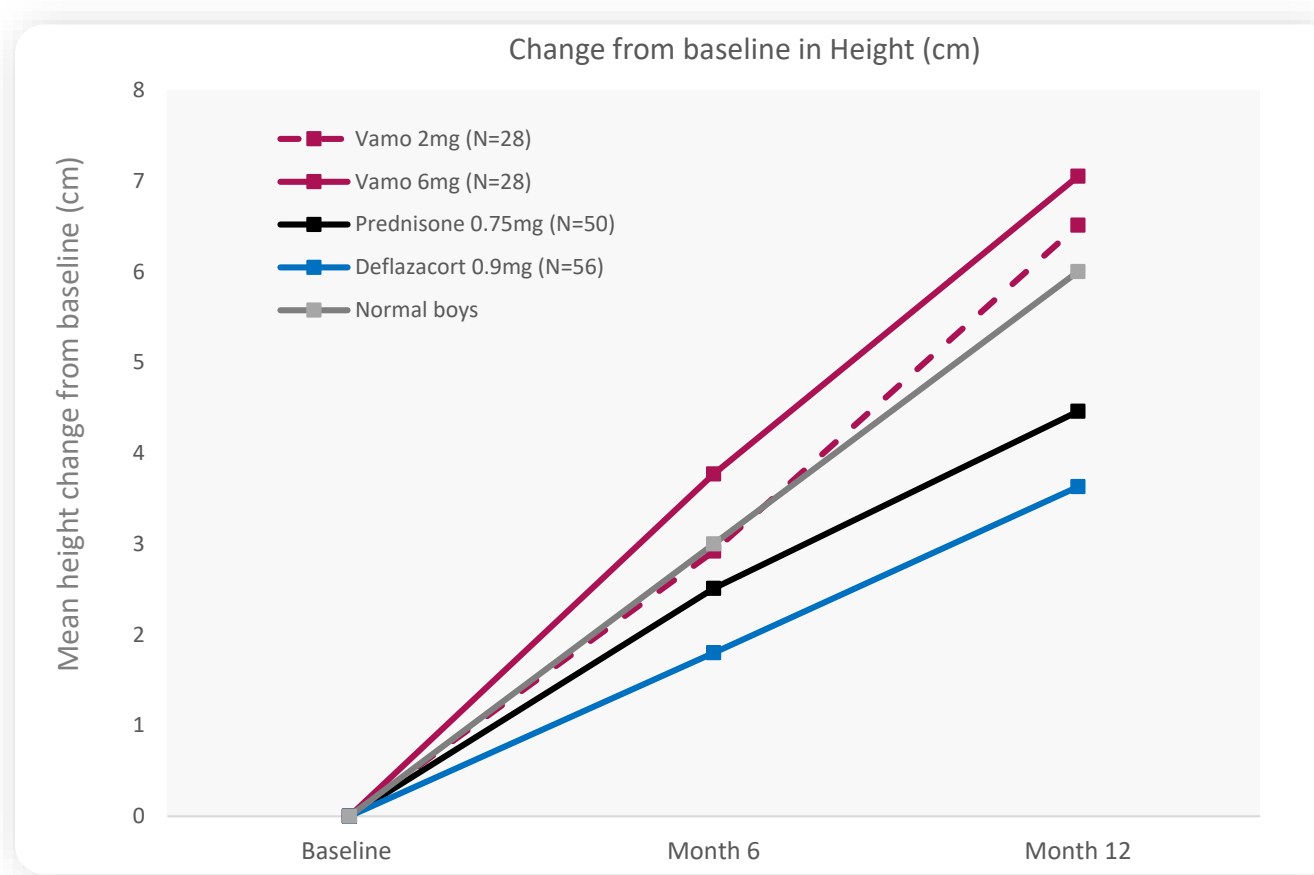
Growth trajectory (VISION-DMD)



Data from VISION-DMD Pivotal Study: Safety Population 2 (SAF-2); PDN – Prednisone 0.75 mg/kg/d; PDN-VAM: growth trajectory (z-score) compared for prednisone in Period 1 and vamorolone (2 + 6 mg/kg/d) in Period 2; All doses daily; MMRM estimates of changes from baseline; Mah et al; ePoster LB.08 WMS 2021

Vamorolone unlike other steroids preserves normal, long-term growth

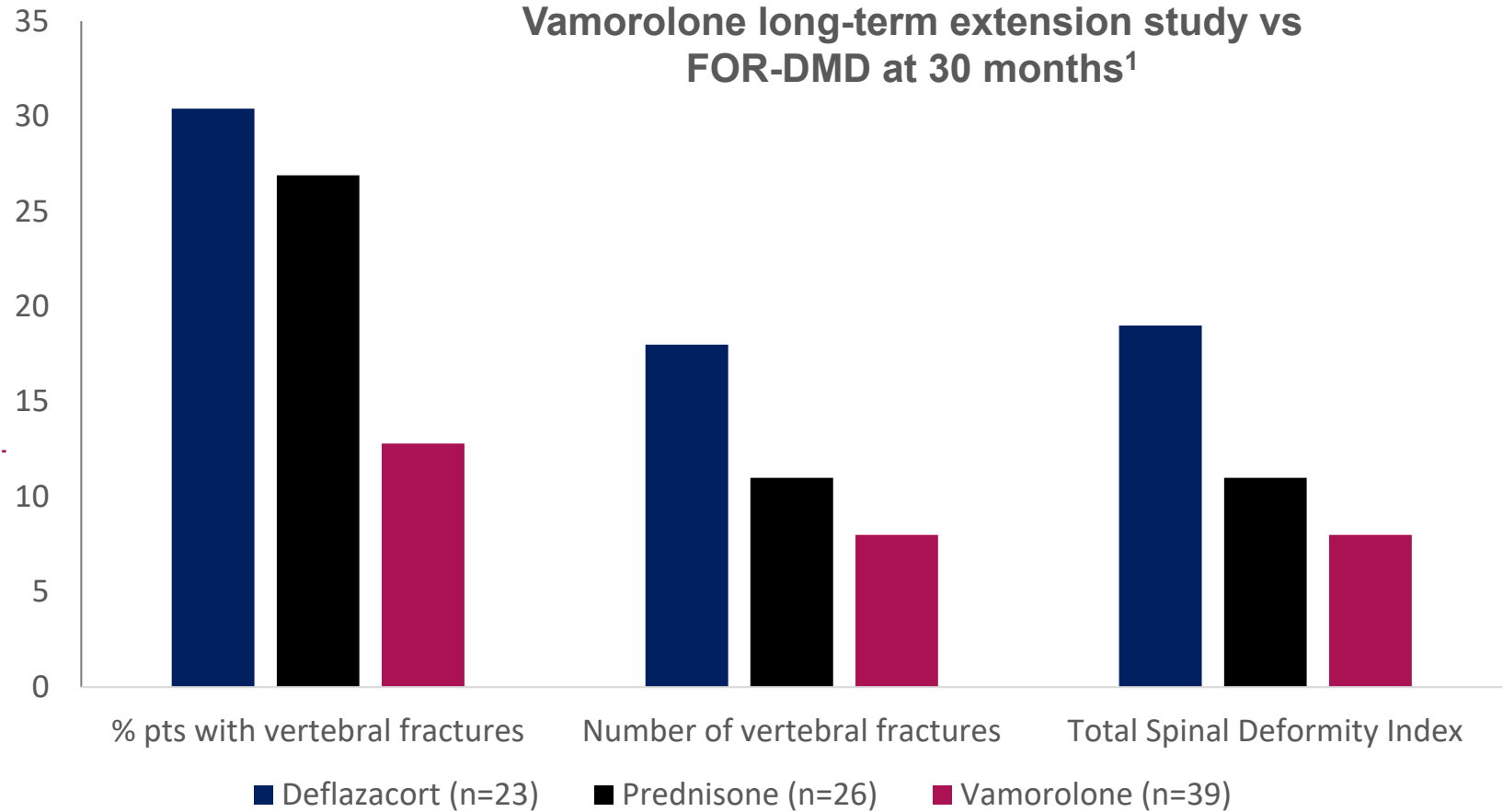
Growth trajectory VISION-DMD vs FOR-DMD (natural history)



Vamorolone leads to fewer and less severe spinal fractures

Vamorolone long-term extension study vs FOR-DMD at 30 months¹

Reduction of number of patients with vertebral fractures by approx. 50%







1: https://www.santhera.com/FP03-WMS_poster_20_August_2022.pdf Spinal Deformity Index (SDI): sum of the Genant Grades from T4 to L4, and therefore, is the composite of both fracture number and severity

Summary of value proposition for vamorolone in DMD

- **Durable efficacy comparable to standard of care**
- **Preserved bone health (unlike deleterious effect of standard steroids)**
- **Improved safety profile compared to prednisone evident at 24 weeks**
- **Long-term treatment profile being further explored in LTE and EAPs**



Potential approvals in Q4-2023 allow Q1-2024 launches in US and EU

	2022		2023				2024			
	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
		FDA Filing				Potential Approval Oct 26 th 1	Launch 2			
	EMA Filing					Potential Approval	Launch 3			
			MHRA Filing			Potential Approval		Launch 4		
							Potential Filing			



Orphan drug exclusivity in US (7 years) and Europe (12 years incl. ped. extension)

Patent protection at least until 2040 (US) and 2035 (EU)

1: FDA decision expected at so-called PDUFA date set to October 26th, 2023 2: Expected through partner Catalyst
 3: Staggered launch starting with Germany; 4: Launch review by NICE (National Institute for Health and Care Excellence) evaluation
 EU orphan protection 10 years plus pediatric 2-year extension; EU IP Including 5-year Supplementary Patent Certificate (SPC)



Santhera holds global rights to vamorolone in all indications

- **North America**

- Partnership with Catalyst (NA)

- **China**

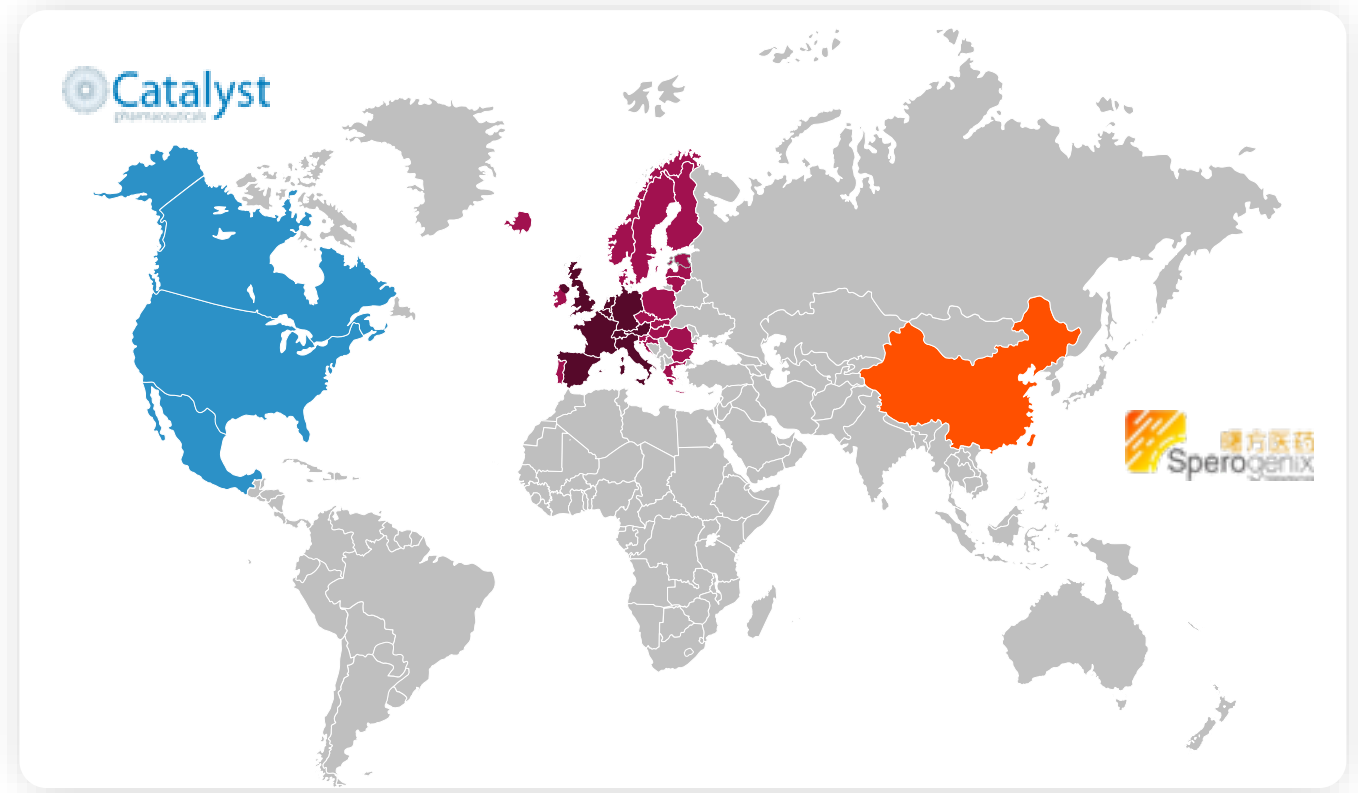
- Partnership with Sperogenix (CN)

- **Europe**

- Own commercialization (next slide)

- **Rest of world**

- Further out-licensing opportunities



Catalyst is our commercial partner of choice for North America

- **Founded 2002, IPO 2006**
- **Market capitalization USD 1.4 billion as of June 22, 2023 (CPRX, Nasdaq)**
- **Proven commercial capabilities: targeted total revenues 2023 of USD 375 – 385 million**
 - Two marketed drugs, Firdapse (amifampridine) and Fycompa (perampanel)
 - **Focus**
 - neurological disorders
 - expand portfolio in rare and orphan diseases
 - **Strong financial position for growth***
 - total revenues of USD 85.4 million for Q1-2023
 - strong cash generation capability
 - cash of USD 148 million (Q1-2023)

Strong Financial Position Underscores Successful Execution of Strategic Initiatives

(in millions)

Q1 23 Results

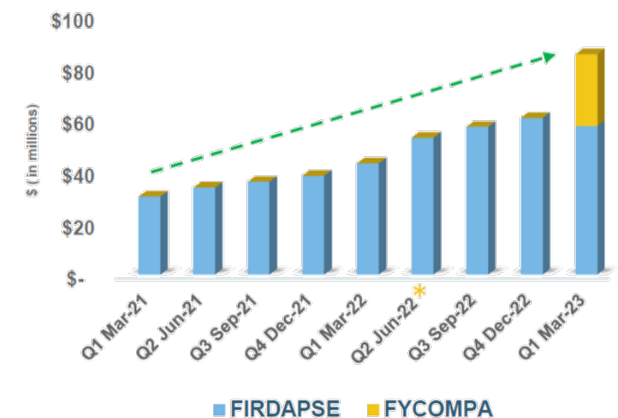
Cash Position	\$148.2
Record Net Product Revenue	\$85.3

FY 2023 Projections

Total Net Revenue Estimates	\$375 - \$385
FIRDAPSE Net Product Revenue	\$245 - \$255
FYCOMPA Net Product Revenue	\$130

Non-GAAP Net Income	\$195 - \$205
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Total Net Revenues 2021 – YTD 2023



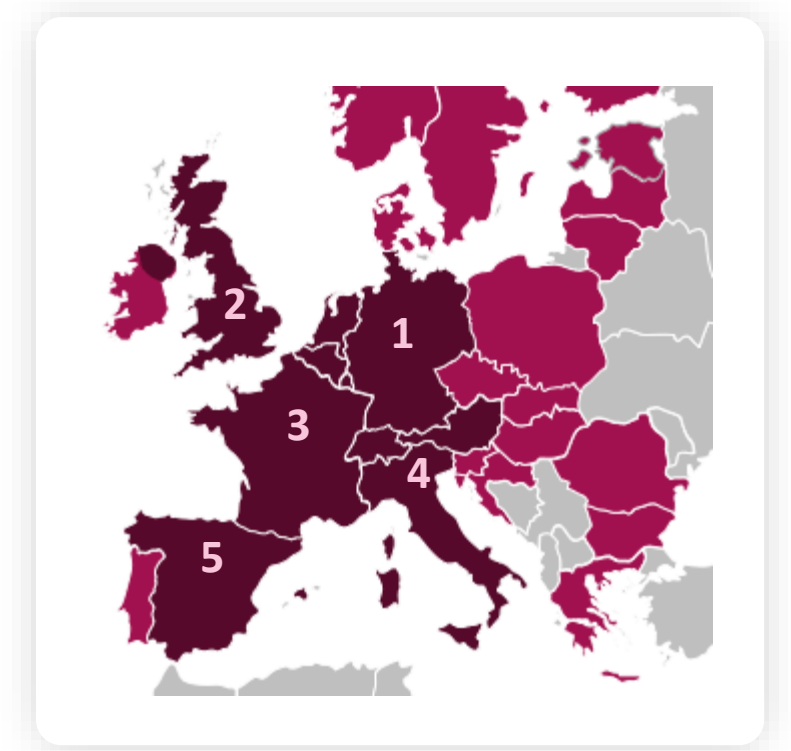
Catalyst Pharmaceuticals:

Transformative deal valued up to USD 231 million + royalties

- **Upfront of USD 75 million represents more than Santhera's market capitalization pre-signing**
 - Provides funding for EU launch and for healthy balance sheet through repayment of short-term debt
 - Additional equity investment of USD 15 million funds future development
- **Santhera exploits vamorolone potential outside of North America while developing & co-funding future global indications together with Catalyst**
- **Catalyst commits USD 36 million for FDA approval milestone (of which Santhera retains USD 10 million)**
- **Santhera continues to participate in the success of vamorolone in North America**
 - Up to USD 105 million in potential sales milestones
 - Up to low-teen % annual royalty payments to Santhera
 - Catalyst pays third-party royalties related to North American net sales

Santhera commercial launch in key European geographies

- **Early access programs starting in Q4-2023 in FR and UK**
- **First launch in Germany in early Q1-2024**
- **Commercialization in core Western markets by Santhera**
 - Lean commercial organization with up to 60 incremental FTEs
 - Peak sales of EUR >150 million in Santhera territory in DMD alone
- **Commercialization through distributors outside core markets**
 - Additional revenue from partners



Vamorolone – a pipeline in a product with multi-indication potential

- **Focus on patient population benefiting from a prolonged and safer steroid treatment**
- **Ongoing selection process identified various therapeutic areas**
 - Internal research supported by *Back Bay Life Science Advisors, KPMG and tranScrip*
- **Candidate indications for development will be prioritized over the coming months together with partner Catalyst**

Therapeutic Area	Indication
Neurology	Becker Muscular Dystrophy*
	Myasthenia Gravis Ocular*
	Chronic Inflammatory Demyelinating Polyneuropathy
Pulmonology	Sarcoidosis*
	Idiopathic Interstitial Pneumonitis
Nephrology	Frequently Relapsing Nephrotic Syndrome*
	Membranous Nephropathy
Rheumatology	Dermatomyositis
	Juvenile Rheumatoid Arthritis
	Polymyalgia Rheumatica
Hematology	Genetic or Acquired Anemia
Hepatology	Autoimmune Hepatitis Type 2

* Indications with most advanced analyses

Santhera financial status

Santhera Pharmaceuticals is listed on the Swiss Stock Exchange SIX: Ticker SANN

- **Key figures (CHF million as of June 30, 2023*)**

• Net (loss) for the period	(23.3)
• Cash (used) in operations	(15.5)
• Cash & cash equivalents	1.7
• Debt outstanding (maturity 2024) **	(49.1)
• Shareholders` equity	(42.8)

- **Capital structure (as of August 31, 2023)**

- Basic shares outstanding 12.6 million
- Market capitalization CHF 110 million (per share CHF 8.74)
- Major shareholders Catalyst (11.2%) and Idorsia (10.3%)
- Research coverage by H.C. Wainwright and valuationLAB

- **Recent transaction**

- 07-2023: Vamorolone US licensing to Catalyst
Raxone/idebenone divestment to Chiesi

- **Cash runway**

- Into 2025 incl commercial EU infrastructure & launch

- **Upcoming milestones vamorolone**

- Q4-2023: CHMP (EU), MHRA (UK) and FDA decision (US PDUFA Oct 26th)
- Q4-2023: Early access programs in UK and France
- Q1-2024: Commercial launch by Catalyst (US) and Santhera (EU)

Santhera is well positioned for future growth

Future potential for vamorolone as pipeline within a product not factored in current valuation

- **Healthy balance sheet with low debt and sufficient cash for own commercialization in core EU markets**
- **Non-dilutive income via own EU sales, licensing income and additional opportunities for partnering**
 - DMD market is well defined across global territories with a need for better foundational therapy
 - EUR >150 Mio peak sales in Santhera European territory with vamorolone in first indication DMD
 - Strong partner Catalyst for US and worldwide opportunities beyond existing China partnership with Sperogenix
 - International patent protection at least until 2040 (US) and 2035 (EU)
- **Potential beyond DMD for vamorolone as replacement for chronic steroid treatment**
 - Additional indication development to be conducted jointly with Catalyst Pharmaceuticals
 - Shortlist of indication further prioritized in coming months



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